

REMARKS

The Office Action of November 7, 2007, has been carefully considered.

The specification has been amended to add a reference to the prior PCT application, and to utilize subject matter headings.

Claims 1-5, 7 and 9-11 have been rejected under 35 USC 102(b) as anticipated by Cagliostro et al, and Claims 6, 8 and 11 have been rejected under 35 USC 103(a) as obvious over Cagliostro et al in view of Luhleich et al.

Claims 1 through 13 have now been canceled and replaced by a new set of Claims 14 through 28 written in proper form for U.S. practice. New Claim 14 sets forth the steps of Claim 1 in a sequential form, in particular, obtaining a resin impregnated, paper- or fleece- based body with a honeycomb shape, pyrolyzing the base body, and stabilizing and/or compressing the pyrolyzed base body. The stabilized and/or compressed base body is then coated with a carbon-containing solution and pyrolyzed once again to obtain the carbon element of the invention.

At column 2, line 60 through column 3, line 6, Cagliostro et al discloses a sequence of steps for forming a light weight ceramic composite honeycomb structure. According to this process, a loosely woven fabric having a honeycomb shape and exhibiting a high char yield and geometric integrity, is pyrolyzed at a temperature of between about 700 and 1100°C, a layer of ceramic material is evenly deposited on the pyrolyzed fabric and the coated ceramic honeycomb structure is recovered. This honeycomb structure may be additionally pyrolyzed or oxidized between 500 and 1000°C in order to remove the pyrolyzed fabric of the structure, leaving a totally ceramic article.

Two clear differences are apparent between the process

disclosed by Cagliostro et al and the claimed invention.

First, the starting material of Cagliostro et al is a loosely woven organic polymer fabric, whereas the claimed invention utilizes a paper or fleece base body. Paper and fleece have a closed structure.

In addition, the claimed invention requires coating the stabilized/compressed base body with a carbon-containing solution, and conducting a further pyrolysis only after the body is coated. There is no disclosure or suggestion in Cagliostro et al of performing a coating step prior to the second pyrolysis.

The object of the second pyrolysis or oxidation step of Cagliostro et al is to remove the pyrolyzed fabric of the structure; clearly this will not be the result of the second pyrolysis step of the claimed invention. Indeed, the specification at page 5, lines 9-20, in the discussion of the example, states that the carbon honeycomb board is subjected to *resin impregnation* followed by *recarbonization*, a process which is repeated to *increase the mechanical properties*.

Clearly, the final step of the invention is to recarbonize the stabilized honeycomb structure, whereas Cagliostro et al intends to remove the carbonized fabric from the ceramic coated structure.

Luhleich et al relates to a molded body having a corrosion-proof protective layer, which may be formed by application of a paste or ceramic slip to the body followed by rapid heating to a temperature in the range of 1550 to 1800°C. Luhleich et al, however, does not otherwise relate to a process according to the invention, and does not cure the defects cited above for the Cagliostro et al reference.

Withdrawal of these rejections is requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in

condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



Ira J. Schultz
Registration No. 28666
Attorney for Applicants
(703)837-9600, ext. 23

LAW OFFICES
DENNISON, SCHULTZ & MACDONALD
SUITE 105
1727 KING STREET
ALEXANDRIA, VIRGINIA 22314-2700
703 837-9600